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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,663	07/02/2001	Antonio A. Garcia	A32011-A-PCT	2220

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EXAMINER

TRAN, MY CHAU T

ART UNIT	PAPER NUMBER
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1639

DATE MAILED: 05/02/2003

71

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/807,663

Applicant(s)

GARCIA ET AL.

Examiner

My-Chau T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 10-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I (Claims 1-9) in Paper No. 10 is acknowledged. The traversal is on the ground(s) that the relationship between Groups I to VI is such that they would not pose an unreasonable search burden.

This is not found persuasive because the inventions of Groups I-VI do not relate to a single general inventive concept under PCT Rule 13.1 and pursuant to 37 CFR 1.475(d) for reason of records, the ISA/US considers that any feature which the subsequently recited products and methods share with the main invention does not constitute a special technical feature within the meaning of PCT Rule 13.2 and that each of such products and methods accordingly defines a separate invention.

To reiterate, the special technical feature of this invention is an immobilized silver ion on a support. However, Siiman et al. (1996) disclose the special technical feature of immobilizing silver ion on a substrate (Abstract). Therefore, groups I-VII are not so linked by the same or a corresponding special technical feature as to form a single inventive concept.

The requirement is still deemed proper and is therefore made **FINAL**.

2. Claims 10-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim.

Applicant timely traversed the restriction (election) requirement in Paper No. 10.

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3. This application contains claims 10-23 are drawn to an invention nonelected with traverse in Paper No. 10. Applicant has also indicated in the response (pg. 3, line 3) that claims 10-23 would be cancelled without prejudice. However, this is not a proper request for cancellation of claims 10-23 and claims 10-23 are not cancelled but withdrawn.

4. Claims 1-9 are treated on the merit in this Office Action.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kim et al. (*Biotechnol. Prog.*, 1995, 11(4):465-467).

The instant claim 1 recites a "product" comprise of silver ions immobilized on a support.

Kim et al. disclose a device that comprises a support in which Ag(I) ions are immobilized (Abstract; pg. 465, right col., lines 3-7; pg. 466, left col., lines 42-45). The amino acids formed a complex with the silver ions (pg. 466, left col., lines 6-16). Therefore, the device of Kim et al. anticipates the presently claimed invention.

7. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Siiman et al. (US Patent 5,552,086).

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The instant claim 1 recites a "product" comprise of silver ions immobilized on a support.

The support comprise of polystyrene (claim 2).

Siiman et al. disclose a device that comprises a metal coated polymer support that is in a bioassay (col. 1, lines 32-36; col. 2, lines 50-61). The polymer includes polystyrene (col. 7, lines 35-38). The metal includes silver salt (col. 7, lines 49-57). The metal coating on the support would provide an advantage of enhancing light scattering with excitation in the visible light region (col. 2, lines 58-60). Therefore, the device of Siiman et al. anticipates the presently claimed invention.

8. Claims 5-9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kim et al. (*Biotechnol. Prog.*, **1995**, 11(4):465-467).

The instant claims 5-9 recites a "product" comprise of silver ions immobilized on a support.

Kim et al. disclose a device that comprises a support in which Ag(I) ions are immobilized (Abstract; pg. 465, right col., lines 3-7; pg. 466, left col., lines 42-45). The amino acids formed a complex with the silver ions (pg. 466, left col., lines 6-16).

Alternatively, the claimed invention further differs from the prior art teachings only by the recitation of the method of making the product of immobilized silver ions on a support. The claimed invention appears to be the same or obvious variations of the reference teachings, absent a showing of unobvious differences. The office does not have the facilities and resources to provide the factual evidence needed in order to determine and/or compare the specific method of making the product of immobilizing silver ions on a support of the instant versus the reference

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method of making the product of immobilizing silver ions on a support. In the absence of evidence to the contrary, the burden is upon the applicant to prove that the claimed product of immobilizing silver ions on a support is different from the one taught by prior art and to establish the patentable differences. See *in re Best* 562F.2d 1252, 195 USPQ 430 (CCPA 1977) and *Ex parte Gray* 10 USPQ2d 1922 (PTO Bd. Pat. App. & Int. 1989).

The instant claims (claims 5-9) are written as product-by-process claims. "Eventhough the product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claims is same or obvious from the product of the prior art, the claim is unpatentable eventhough the prior art product was made by a different process." *In re Thorpe*, 777F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). (see MPEP 2113).

9. Claims 5-9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Siiman et al. (US Patent 5,552,086).

The instant claims 5-9 recite a "product" comprise of silver ions immobilized on a support.

Siiman et al. disclose a device that comprises a metal coated polymer support that is in a bioassay (col. 1, lines 32-36; col. 2, lines 50-61). The polymer includes polystyrene (col. 7, lines 35-38). The metal includes silver salt (col. 7, lines 49-57). The metal coating on the support would provide an advantage of enhancing light scattering with excitation in the visible light region (col. 2, lines 58-60).

Alternatively, the claimed invention further differs from the prior art teachings only by the recitation of the method of making the product of immobilized silver ions on a support. The claimed invention appears to be the same or obvious variations of the reference teachings, absent a showing of unobvious differences. The office does not have the facilities and resources to provide the factual evidence needed in order to determine and/or compare the specific method of making the product of immobilizing silver ions on a support of the instant versus the reference method of making the product of immobilizing silver ions on a support. In the absence of evidence to the contrary, the burden is upon the applicant to prove that the claimed product of immobilizing silver ions on a support is different from the one taught by prior art and to establish the patentable differences. See *in re Best* 562F.2d 1252, 195 USPQ 430 (CCPA 1977) and *Ex parte Gray* 10 USPQ2d 1922(PTO Bd.Pat. App. & Int. 1989).

The instant claims (claims 5-9) are written as product-by-process claims. "Eventhough the product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claims is same or obvious from the product of the prior art, the claim is unpatentable eventhough the prior art product was made by a different process." *In re Thorpe*, 777F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). (see MPEP 2113).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (*Biotechnol. Prog.*, 1995, 11(4):465-467) in view of Longiaru et al. (US Patent 5,232,829).

The instant claim 1 recites a "product" comprise of silver ions immobilized on a support.

The support comprise of a 96-well polystyrene plate (claim 2-4).

Kim et al. disclose a device that comprises a support in which Ag(I) ions are immobilized (Abstract; pg. 465, right col., lines 3-7; pg. 466, left col., lines 42-45). The amino acids formed a complex with the silver ions (pg. 466, left col., lines 6-16).

The device of Kim et al. does not expressly disclose that the support is in a plate format that is 96 wells.

Longiaru et al. disclose an immunoassay that comprise of a polystyrene solid support that has enhanced protein binding capacity (col. 3, lines 13-17; col. 6, lines 3-5). The polystyrene solid support is a microtitre plate with 96 wells (col. 7, lines 38-45). The plate capture format

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would provide the advantages of a quicker assay time and a less labor intensive assay format (col. 3, lines 34-38).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a support in a plate format that is 96 wells as taught by Longiaru et al. in the device of Kim et al. One of ordinary skill in the art would have been motivated to include a support in a plate format in the device of Kim et al. for the advantage of a quicker assay time and a less labor intensive assay format (Longiaru: col. 3, lines 34-38). Since both Kim et al. and Longiaru et al. disclose the support is use in a bioassay (Kim: pg. 466, left col., lines 6-16; Longiaru: col. 6, lines 3-5).

13. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siiman et al. (US Patent 5,552,086) in view of Longiaru et al. (US Patent 5,232,829).

The instant claim 1 recites a "product" comprise of silver ions immobilized on a support. The support comprise of a 96-well polystyrene plate (claim 2-4).

Siiman et al. disclose a device that comprises a metal coated polymer support that is in a bioassay (col. 1, lines 32-36; col. 2, lines 50-61). The polymer includes polystyrene (col. 7, lines 35-38). The metal includes silver salt (col. 7, lines 49-57). The metal coating on the support would provide an advantage of enhancing light scattering with excitation in the visible light region (col. 2, lines 58-60).

The device of Siiman et al. does not expressly disclose that the support is in a plate format that is 96 wells.

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Longiaru et al. disclose an immunoassay that comprise of a polystyrene solid support that has enhanced protein binding capacity (col. 3, lines 13-17; col. 6, lines 3-5). The polystyrene solid support is a microtitre plate with 96 wells (col. 7, lines 38-45). The plate capture format would provide the advantages of a quicker assay time and a less labor intensive assay format (col. 3, lines 34-38).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a support in a plate format that is 96 wells as taught by Longiaru et al. in the device of Kim et al. One of ordinary skill in the art would have been motivated to include a support in a plate format in the device of Kim et al. for the advantage of a quicker assay time and a less labor intensive assay format (Longiaru: col. 3, lines 34-38). Since both Kim et al. and Longiaru et al. disclose a polymer support is use in a bioassay (Siiman: col., lines 6-16; Longiaru: col. 6, lines 3-5).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to My-Chau T. Tran whose telephone number is 703-305-6999. The examiner is on ***Increased Flex Schedule*** and can normally be reached on Monday: 8:00-2:30; Tuesday-Thursday: 7:30-5:00; Friday: 8:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew J. Wang can be reached on 703-306-3217. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1123.

mct

May 1, 2003


PADMASHRI PONNALURI
PRIMARY EXAMINER